Fig.

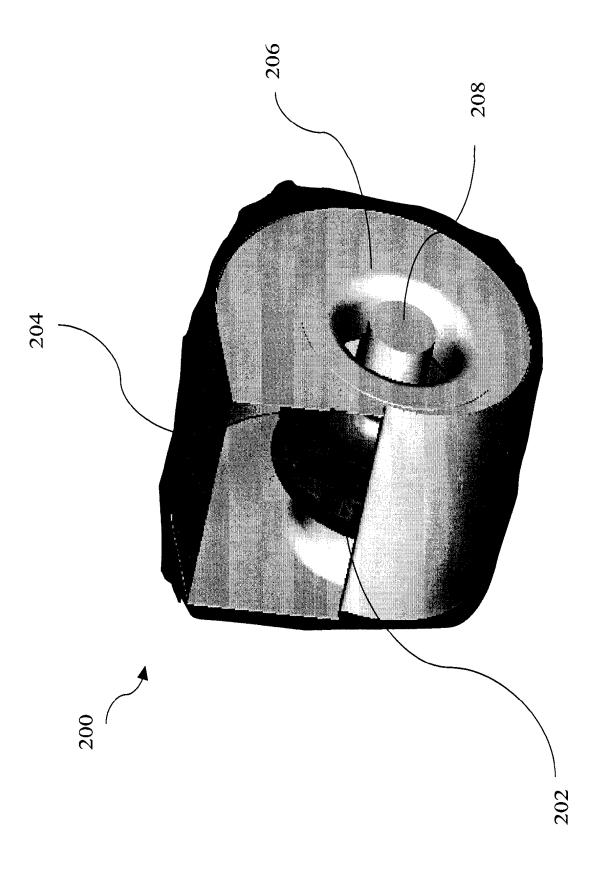
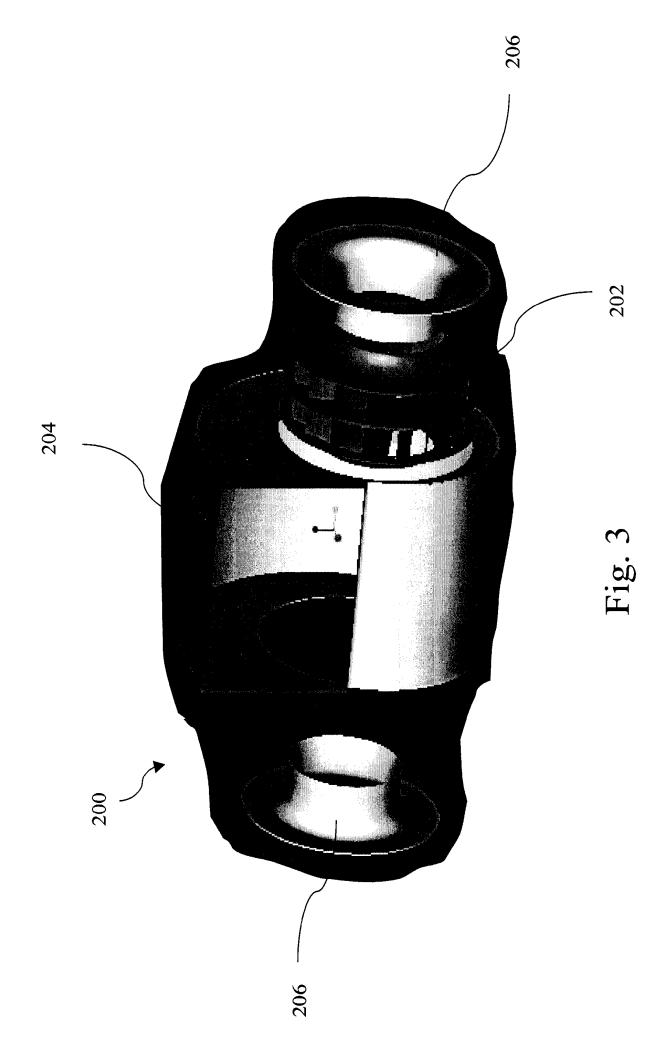


Fig. 2



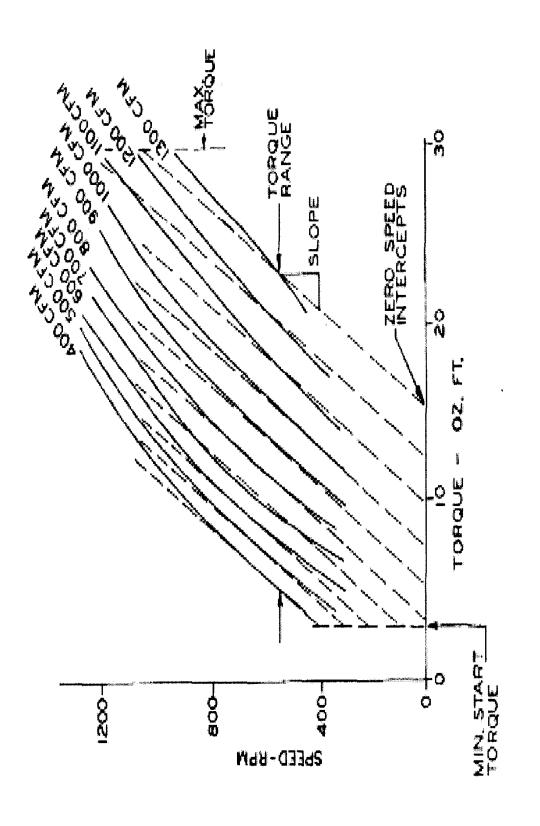


Fig. 4

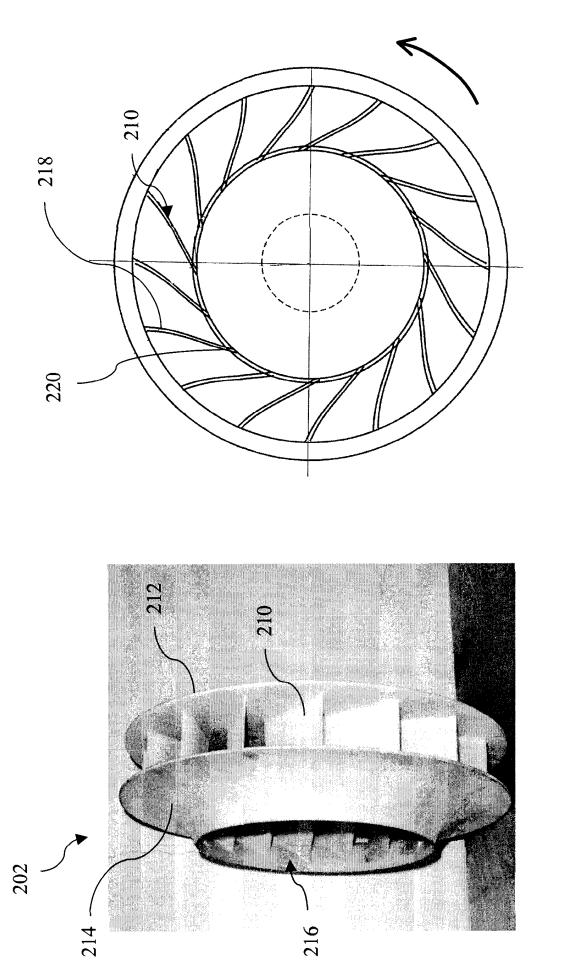


Fig. 5

Fig. 6

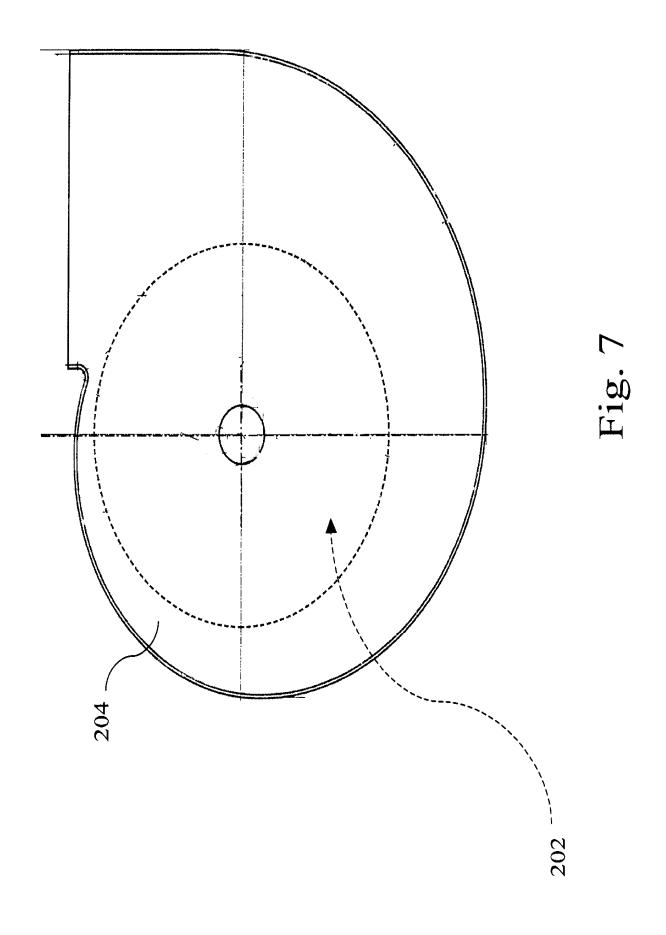


Fig. 8

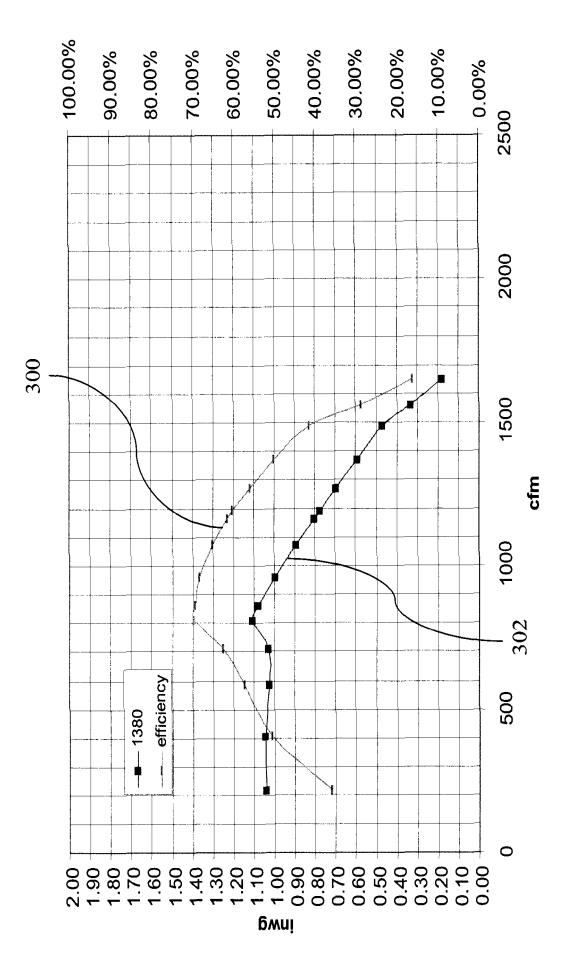


Fig. 9

2.0 1.8 1.6 4. Torque [N-m] 1.2 1.0 8.0 1100 cfm →- 1000 cfm →- 1200 cfm → 900 cfm **→**−800 cfm 9.0 0.4 0.2 1800₁ 1600 009 1400 Speed [rpm] 1000 800 2.5 2 N-m 1.5 0.5 1200cfm - 1000cfm 1100cfm \*- 1300cfm -- 1400cfm → 900cfm 0 200 2500 2300 2100 1900 1700 **rpm** 1500 1300 1100 006 200

S-shaped Blade

Traditional Backward Blade

Fig. 11

Fig. 10 – prior art